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DAVID J. NEWTON ASSOCIATES
INCORPORATED

Civil and Geological Engineering Services

August 26, 1987

Mr. Robert Farrell
C/O MARSHA BAILEY
U.S. Environmental Protection Agency
1200 Sixth Avenue
Seattle, Washington 98101

SUBJECT: Geotechnical Investigation Update; Pacific Wood Treating RBT Site, Ridgefield, Washington.

Dear Robert:

Since meeting with you yesterday and reviewing borehole samples, two additional borings have been extended into the gravels beneath the site. These borings are located west and downslope from the first boring located east of the southeast landfill corner as shown on the accompanying sketch.

Samples from the number 2 and 3 borings consist entirely of clayey silts. In several cases, the materials could easily be rolled into 1/4 inch threads at the insitu moisture condition. In other cases, a slight amount of additional water allowed rolling samples into 1/8 inch threads to lengths of 6 inches, and more. This indicates a relatively high level of plasticity that reflects the presence of clays in the soils. These conditions apply to the soils encountered below the bottom elevation of the existing landfill.

No micaceous silty sand, or clean, well sorted sand as we encountered in Boring No. 1, and as we reviewed yesterday, was found in Borings 2 and 3. The clayey soils extended from the surface to the top of the gravels. Examination of cores recovered from the borings revealed no interbeds of other soil types, including sands.

The upper portion of the gravel deposit in Borings 2 and 3 is weathered, and the gravel matrix contains a much higher clay and silt fraction than the gravel matrix found in Boring No. 1. The upper portion of the gravels is much dryer than the clays. The thickness of the clayey, silty zone in the top of the gravels is 7 to 10 feet. The gravel matrix became more sandy with less silts and clays below the 7 to 10 foot upper section in Borings 2 and 3.

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The clayey soils recovered from below the landfill bottom elevation in these borings, and the top portion of the gravels are, in my opinion, impermeable from a practical standpoint.

We were discussing the ages of the formations yesterday. After our meeting, I realized that this could have left you confused. The age of the Troutdale Formation (the gravels, in this case) is Tertiary. This is obviously pre-glacial. My reference to the post-glacial age applies to the clean sands on top of the gravels. I hope this clears up confusion that you may have regarding age reference.

The clean sands have been included by others as part of the Troutdale Formation. They may well be. It seems that the contrast between the degree of weathering in the gravels and matrix, and the freshness of the clean sands supports different ages for the two units.

Thanks for the opportunity to review the samples with you in person. When we talk of silt, clay and gravels we have a common picture. We will keep you and Marsha informed as we go. Sorry you couldn't make it down Marsha, catch you next time.

Very truly yours,
DAVID J. NEWTON ASSOCIATES, INC.

David J. Newton, P.E., C.E.G.
President

cc: Bryant Adams
Liz Thutt
Dave Brown

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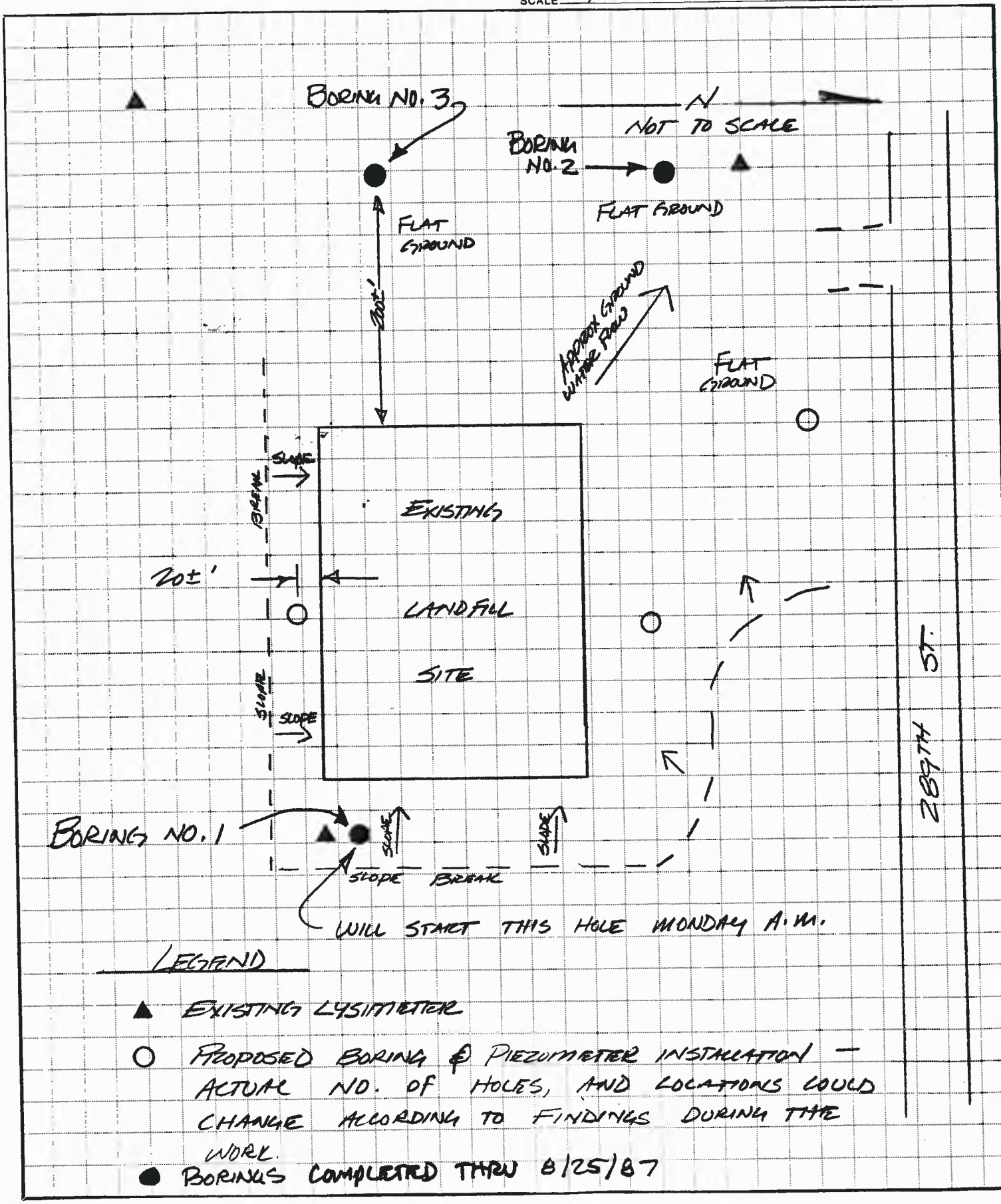
JOB PACIFIC WOOD TREATING RBT SITE RIDGEFIELD
SHEET NO. ____ OF ____
CALCULATED BY QJH DATE 8/21/87
CHECKED BY ____ DATE ____
SCALE NONE



LEGEND

▲ EXISTING LYSIMETER

○ PROPOSED BORING & PIEZOMETER INSTALLATION — ACTUAL NO. OF HOLES, AND LOCATIONS COULD CHANGE ACCORDING TO FINDINGS DURING THE WORK.

● BORINGS COMPLETED THRU 8/25/87